this terminal value can be viewed as what the system could be sold for in the final year of the analysis, or the opportunity cost of not selling it. Not coincidentally, this approach should yield the same value as does the discounted cash flow approach, since a buyer would theoretically be willing to pay the present value of the expected future cash flows for the system.

The ultimate valuation then becomes a simple present value exercise of discounting the cash flows in years one through seven (or whatever the final year of the analysis may be). The valuation decision flows from all of the detailed assumptions made as to the operating possibilities of the system which together create an operating cash flow stream. The other major determinant of valuation is the choice of discount rate at which to discount the operating cash flows. In other words, valuation is very sensitive to cost of funds.

The "sources and uses of funds" format is also used for financing decisions. Once the operating sources and uses have been determined, one can test assumptions as to how much debt the operating cash flows can carry (pay interest on) and amortize (pay principal on). It should be noted here that financial institutions are not willing to lend against the terminal value of a system, so for this purpose terminal value is not included as a source of funds.

The debt number has been optimized when the projections show the debt has been fully paid out when due, interest has been paid annually at the appropriate rate and net ending cash every year is at least zero (or, more realistically, some minimum working capital level). If the projections show that cash is not sufficient to carry and amortize debt, one proceeds with an interactive process by reducing the assumed debt level and testing it again; the process continues until it meets the test of net ending cash in every year being greater than zero. Once the debt number has been arrived at, it can be subtracted from the purchase price and the balance is the required equity needed for the venture.

The valuation of systems built and held by original owners reflects the same analysis as an acquired system. To illustrate this, Continental presents a case study of its Brockton, Massachusetts system, followed by a case study of its acquisition of four systems in Northern California and Nevada.

B. The Brockton Build And Hold Model

Exhibit A presents the financial history of the Brockton system. It is somewhat unique in that its accounting records are "apples-to-apples" from inception through the present; the company began building the system in 1982 and has held it as a separate corporate and financial entity, Continental Cablevision of Brockton, Inc. It therefore provides a dynamic

Continental Cablevision of Brockton
Cumulative Invested Capital
1983 - 1992

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Basic Subscribers	12,917	16,490	17,416	16,993	18,649	19,811	21,274	21,026	20,859	20,628
Gross Revenue	1,915,126	4,995,778	5,756,186	5,859,520	6,989,757	7,841,024	8,760,319	8,968,467	9,125,605	9,398,176
Operating Expenses	2,313,026	3,688,855	3,733,830	4,067,990	4,408,536	4,677,300	5,251,026	5,248,336	5,341,087	5,468,871
Operating Income	(397,900)	1,306,923	2,022,356	1,791,530	2,581,221	3,163,724	3,509,293	3,720,131	3,784,518	3,929,305
Interest Expense	0	831,810	1,192,967	1,084,914	1,046,090	968,439	905,000	680,000	383,403	140,059
Other	0	0	0	0	0	0	0	0	0	(97,231)
Depreciation	815,028	1,527,955	1,473,682	1,382,773	1,391,157	1,400,231	1,528,026	1,463,387	1,380,199	1,348,210
Net Income (Loss)	(1,212,928)	(1,052,842)	(644,293)	(676,157)	143,974	795,054	1,076,267	1,576,744	2,020,916	2,538,267
Gross LT Tangible Assets	13,782,648	16,312,136	17,405,407	16,952,332	17,232,577	17,725,845	18,553,312	18,944,237	19,460,951	20,102,783
Accumulated Depreciation	(691,028)	(2,190,384)	(3,661,518)	(4,402,017)	(5,734,409)	(7,005,871)	(8,404,879)	(9,692,049)	(10,638,591)	(11,711,330)
Net LT Tangible Assets	13,091,620	14,121,752	13,743,889	12,550,315	11,498,168	10,719,974	10,148,433	9,252,188	8,822,360	8,391,453
Restatements for Regulatory Accounting										
Invested Capital:										
LT Tangible Assets - Net	13,091,620	14,121,752	13,743,889	12,550,315	11,498,168	10,719,974	10,148,433	9,252,188	8,822,360	8,391,453
Accumulated Return Deficiency (1)	0	3,438,503	6,644,779	9,562,178	12,912,545	15,872,302	18,629,496	21,540,477	24,518,487	27,782,112
Cumulative Invested Capital	13,091,620	17,560,255	20,388,668	22,112,493	24,410,713	26,592,276	28,777,929	30,792,665	33,340,847	36,173,565
(1) Allowable Return (17% of Invested Capital)	2,225,575	2,985,243	3,466,074	3,759,124	4,149,821	4,520,687	4,892,248	5,234,753	5,667,944	6,149,506
Add: Net Loss (before Interest)	1,212,928	221,032	0	0	0	0	0	0	0	0
Less: Net Income (before Interest)	0	0	(548,674)	(408,757)	(1,190,064)	(1,763,493)	(1,981,267)	(2,256,744)	(2,404,319)	(2,678,326)
Deficiency	3,438,503	3,206,275	2,917,400	3,350,367	2,959,757	2,757,194	2,910,981	2,978,009	3,263,625	3,471,180

		Cumulative Invested Capital
Pre-Tax WACC	14%	25,521,033
	15%	28,806,689
	16%	32,351,982
	17%	36,173,565
	18%	40,288,976
	19%	44,716,680
	20%	49,476,108
	21%	54,587,696

view of a representative mid-sized cable system. While each system has its own story, Brockton is sufficiently representative to demonstrate the broad financial characteristics of a cable television construction project with normal subsequent system development and operation.

As can be seen from the preceding "Cumulative Invested Capital" chart, the cable operator invests in a new cable system in three primary ways: (1) physical assets; (2) start-up losses; (3) deferred returns.

1. Physical assets. Funds are expended for the actual cost of construction of the system and its related facilities. In Brockton, Continental spent over $14 million on this category of asset, which for book purposes had been depreciated to $8.4 million by 1992.

2. Start-up losses. While the system is being marketed and earning acceptance in the marketplace, it incurs losses. Cable systems have characteristic growth cycles which must be accounted for in establishing rate base. Cable systems are exceptionally capital intensive. They are built out to pass most, if not all, homes in a community, and are typically engineered to pass sufficient signal to two televisions in each home. Yet adding subscibers to a new system is often a painstakingly slow process. To gain subscribers, a firm must

conduct major marketing campaigns to attract and retain a loyal base of subscribers. When new systems are first marketed typically between 35% to 45% of the homes passed by cable will subscribe. Penetration will climb by 4% to 5% the second year of operation and then flatten to a slower 2% to 3% annual growth until maturation. During the startup years, revenues are insufficient to cover operating expenses much less to provide any return on capital. The value of a viable subscriber base built in this manner contributes substantially to the value of the firm as a going concern. In Brockton, Continental incurred net losses totalling $3.6 million ($1.4 million before interest expense) over the first four years of the system's operation.

In financing a project such as Brockton, the operator must ensure that there is sufficient cash to not only pay for construction, but to fund the early operating losses -- which are the equivalent of actual cash outlays. The rational cable operator not only recognizes and provides for these losses in real cash terms, but avoids incurring them (i.e., doesn't build the system) unless it reasonably foresees earning a sufficient return on the entire invested amount to satisfy its own investors.

3. Deferred returns. During the period of early losses, the operator earns no current return on the capital (both hard assets and operating losses) invested in the system. In

Brockton, Continental's deferred returns had accumulated to $26.4 million by 1992 -- over 150% of the first two categories combined. (The model assumes a pre-tax 17% rate of return to approximate the 11.25% after tax return which telephone companies are currently permitted.)

However, the operator's investors expect a return on the capital they have invested in the company, and are not willing to declare a moratorium on that expected return while the system is under development. Equity investors measure their return over a multi-year period, and in return for some additional risk premium, are willing to wait for their returns until the system turns cash-positive -- providing that, on average and adjusted for the time value of money, they have earned a fair return on their invested funds <u>for the entire time period</u>. When the system is losing money, the investors' return expectations are "accumulating."

In order to deliver delayed-but-adequate returns to the investors, the cable operator must earn a fair return on <u>all</u> capital invested each year, not just on that invested in hard assets. If returns are subpar, the operator will not be able to attract further investment capital or, in the worst case, will not be able to service debt and the business will fail.

When Continental's investment in the Brockton system is measured taking all three of the above categories into account,

its actual investment in the system ($36 million) is revealed to be more than four times than that carried on its books as hard assets (depreciated plant of $8.4 million), and almost triple that originally invested in hard assets ($14.1 million).

Were Continental to consider selling the system at any point, it would be rational to demand at least what was invested in the system to that point, in this case $36 million. Application of a market-approximating 10X multiple to Brockton's 1992 operating income would yield an asking price for this system of $39.3 million; it is presumably no accident that this figure roughly corresponds to the total prior investment, including foregone return, in the system to that point.

Yet, were the buyer to pay such a price, GAAP would require the buyer to book a large part of the purchase price (typically up to 40%) as "intangibles," a term which connotes "soft" costs. This is misleading because, as demonstrated, the entire purchase price would have done no more than reimburse the seller for his actual "hard" investment in physical plant, start-up losses, and deferred returns. Accordingly, the acquisition "premiums" are indeed a misnomer, as the excess over book or tangibles really represents capital actually invested in the enterprise.

C. The Fresno Acquisition Model

In addition to compensating sellers for prior losses, part of the purchase price for many systems acquired during the 1980's reflected unrealized economies and future growth potential.

In order to give the Commission a first-hand look at the factors which entered into cable acquisitions during the 1980's, Continental includes with these comments (Exhibit B) the actual internal venture analysis that was prepared by its senior management and relied upon in connection with its 1986 purchase of four Northern California and Nevada cable systems from McClatchy Newspapers. The largest of these systems was the one which serves Fresno, California. The venture analysis was prepared before Continental bid on these properties and presents best case ("optimistic") and worst case ("sandbag") scenarios that were used in determining the price to bid for these systems. Continental eventually paid $127 million or $1,420/subscriber (then a record price) for the McClatchy properties which served some 90,000 subscribers in October, 1986. Since acquiring the systems, Continental has increased subscriber penetration from 41% to 58%, adding nearly 74,000 subscribers as a result of rebuild, marketing, programming and customer service improvements.

The $127 million purchase price was allocated as $82 million in tangible assets and $45 million in intangibles. The acquisition, however, fit well with Continental's existing Northern California systems, nearly tripling the size of that management region and giving it a critical mass that justified further investments in system enhancements.

The venture analysis provides a candid inside look at the considerations that went into the decision to bid on the McClatchy systems. The thrust of the analysis is that the properties, if developed properly, would ultimately be a good investment. Development required increasing the number of basic and pay television subscribers and building unserved areas. According to the venture analysis written by Barbara Sitkin who was the then Vice President and General Manager for Continental's Northern California region: "One scenario represents that which is most probable, assuming we cure the political and operational messes, invest the capital necessary to create decent product and spend time developing the markets."

The major assumption in the financial projections included $12 million in capital additions, starting at the time of purchase, to be used to increase channel capacity, construct 8,000 new passings, install a computerized billing system, new phone system and purchase new vehicles. Marketing was another major focus with a targeted lift in basic subscribers in two of

the systems, pay TV emphasis in a smaller "classic" system and "good all around marketing" in the fourth.

Although revenue per subscriber was projected to increase an average of $1/year, part of that increase would come from selling additional products. The major sources of projected increased revenues, which would justify the purchase, were an increase in penetration from 42% in year 1 to 61% in year 7, as well as an increase in new homes passed from 206,000 to 260,000.

The combination worked. By improving the systems' signal quality, expanding channel capacity, adding new programming, investing in customer service through new billing and phone systems, and budgeting heavily in marketing (10% to 12% of revenue, shown at venture analysis, page 2) the system gained subscribers and revenue increased, justifying the investment.

The following chart outlines the initial assumptions for year 1 (1986) and year 7 (1992) shown in the venture analysis and compares them with actual year end numbers for 1992.

	Projected 1986	Projected 1992	Actual 12/92
Homes Passed	215,330	260,286	282,439
Subscribers	93,514	158,260	163,957
Basic Penetration	47%	61%	58%
Pay TV Subscribers	82,319	157,357	133,335

Because the acquired McClatchy systems clustered well with Continental's existing Northern California systems, further improvements were justified. Over time, the larger geographic reach enabled Continental to embark on an aggressive program of fiber deployment, plant rebuilds (from 19 to 50 channels), and the installation of addressable converters. Continental also invested significantly in human resources. Employees were added to improve customer response time and permit extended service hours. With clustering, the Northern California region became large enough to support its own regional training center which helped to develop employees and improve customer service.

The "acquisition premium" of $45 million and the high early year marketing costs proved to be reasonable investments which benefited customers. The acquisition premium also, as in Brockton, reflected early years operating losses and deferred returns for the seller, McClatchy Newspapers.

IV. VALUING THE RATE BASE

A. The Commission's Proposed Valuation Models Are Inadequate

Examination of real cable systems like Brockton and Fresno illustrates not only the actual financial assumptions guiding cable investment and valuation, but also illuminates the fundamental deficiencies in each of the Commission's proposed rate base valuation suggestions.

1. Original Cost

If by "original cost" the Commission means only the cost of tangible property incurred by the original owner, then the proposal is fundamentally deficient even for application to systems such as Brockton which have never changed hands. Apart from the absence of appropriate records (discussed at Part IV.C.4.), limiting the rate base to the net book of tangible assets would ignore (confiscate) all of the start-up losses, deferred returns, and other intangibles which give value to cable television as a going concern. Indeed, the courts have held that this additional amount of value over book must be considered in setting rates.

> The decisions of this Court declare: 'That there is an element of value in an assembled and an established plant, doing business and earning money, over one not thus advanced, is self-evident. This element of value is a property right, and should be considered in determining the value of the property, upon which the owner

> has a right to make a fair return when the same is privately owned although dedicated to public use."

McCardle v. Indianapolis Water Co., 272 U.S. 400, 414 (1926).

2. Replacement Cost

Replacement cost valuation does not reflect the actual expenditures of an owner in developing the plant to date, even if the system is held by the original owner. Most cable systems have been developed over several technological generations. Continental's first systems had 12 channel capacity, the technological state of the art in the mid 1960's. All services were provided, undifferentiated, to all subscribers. Over the years, those systems have been periodically rebuilt and upgraded to increase channel capacity.[17/] In so doing, Continental has upgraded amplifiers, enhanced headends, added earth stations, changed out converters, and replaced coaxial cable with fiber. Each system enhancement has required substantial material and labor costs, all necessary at the time, but only some of which would be expended today were we to build a system anew. Nor could Continental economically build such a system today, even theoretically, because today there are no significant unwired franchise areas. As a result, the cost of building such an

---

17/ Today Continental systems have an average capacity of 52 channels.

"ideal" system today, in order to leapfrog technological evolutionary steps, is more than twice the cost per home than one would theoretically incur, because the second operator's market share would be substantially limited by the power of an incumbent efficiently operating a cable system as a going concern.

3. Reproduction Cost

The cost of reproducing an old technology system really makes no sense in determining the value of the capital committed to the enterprise. First of all, calculations as to various costs of obtaining and using technologically obsolete equipment is itself inherently subject to inaccurate predictions. Moreover, because these particular costs are for establishing tangible assets, they would naturally fail to reflect the necessary capital which must be committed to a new build in sustaining start-up losses and deferred returns through the initial years of system development.

B. Continental's Proposed Transition Adjustment for Systems Held By Original Owners

Looking only to the net book value of tangible assets does not fairly value the rate base of cable systems now moving into regulation. To the tangible assets the Commission must first add early year start-up losses. As cable has suffered losses during start-up years, it has expensed these losses. Subscribers have benefited and continue to benefit from the rates

produced by start-up losses and deferred returns. A regulated firm would have capitalized those operating losses and recovered them in later years. The fact that cable's accounting has not yet created that regulatory asset does not mean that those amounts do not produce economic value, though it may only be reflected in "goodwill" or other "intangibles". Had cable operators accounted for them in anticipation of rate of return regulation, they would necessarily have added them to the rate base as a regulatory asset for later recovery.

The Commission must also account for the lost opportunity costs of deferred returns. Investors have invested in cable with the legitimate expectation that returns in later years will fully compensate them for invested capital for the entire term of the investment.

To change the rules for cable going forward, it is therefore necessary to "true up" the balance sheet to make the starting points comparable. Such an approach is also analytically appropriate, for in changing the accounting rules for any industry, it is sound practice to not only change the income statement treatment going forward, but to adjust the balance sheet for the impact of the retroactive application of the changed policy.

The fundamental value of cable companies should not depend upon the accounting classification of assets as

"goodwill," "franchise rights," or other intangibles, when the records were generated under fundamentally different assumptions, and may not themselves represent the full underlying economic value of the firm.

As one example, if a telephone asset is retired before the end of its contemplated service life for depreciation purposes, the net undepreciated plant used to calculate the telephone company rates remains unchanged. This phenomenon is known as "stranded investment" and its effect on the stated value of local telephone industry plant has been and continues to be quite large by the industry's own calculations. Because capital recovery has been assured under regulation, telephone companies have no incentive to write-off the value of retired but not yet fully depreciated plant. Cable companies, on the other hand, write-off plant when in fact it is retired and usually take the maximum allowable write-offs of capital incurred to start a system. Under current telephone company-type accounting, with the expectation that the cost of the retired plant would eventually be recovered through regulated rates, revenue requirements per-subscriber per-month would increase substantially if cable had the opportunity to earn a return on this retired plant.[18/]

18/ Typical of cable companies, Continental has written-off assets worth nearly one hundred million dollars over the

[Footnote cont'd.]

As another example, in most instances there is little reason for a cable operator to precisely allocate intangibles into various components -- such as franchise rights, customer lists, etc. -- when any subdivision in the unregulated environment would have little meaning to the acquiring company. Yet the accounting treatment for a portion of a purchase price as "goodwill" does not mean that the company has no added economic value (and benefit to subscribers) as a going concern.[19/] At the same time, the valuation standard should be one that can be implemented using existing or readily replicable company data.

In order to assign a "fair value" to the cable television rate base, systems held by original owners must be valued at the time the property is "first devoted to public use," that is, upon implementation of the rate regulation provisions of the 1992 Act.[20/] The best measure of that value is the cost shown on the books for tangible property, plus a one-time

---

[Footnote cont'd.]

last four years alone. Rate base regulation would inflate cable companies' reported net plant assets to rate base calculations if telco accounting were used and applied historically.

19/ "A good property has an intangible value or going concern value over and above the value of the component parts of the physical property ..." McCardle v. Indianapolis Water Co., 272 U.S. at 413.

20/ September 1, 1993.

transitional adjustment to add the documented costs of start-up losses and deferred returns. "Truing-up" cable's rate base will establish cable rate regulation on the proper constitutional footing -- assurance of an adequate return on invested capital -- and satisfy the policy of preserving the cable operator's ability to attract investment capital needed to maintain systems and improve plant in an increasingly competitive environment.

C. Acquired Systems

The proper valuation of cable has been unnecessarily confused with the acquisition prices paid for cable systems in the 1980's. Continental cannot speak for the prices paid by every cable operator in the 1980's. No doubt one can find examples of cable purchasers who overpaid. The same can be said for some who purchased broadcast properties during the 1980's. But those anomalies cannot substitute for reasoned examination of the economics underlying acquisitions and actual efficiencies and innovations introduced by cable operators like Continental who have purchased cable systems at responsible prices and turned them to public benefit.

1. Going Concern/Past Losses In Purchase Price

Our earlier discussion of the Brockton model referred to a hypothetical purchase price for that system. We noted that a 10x multiple of trailing cash flow would approximate the actual

investment made by Continental in bringing the system on line, building the subscriber base, incurring start-up losses and deferring returns in early years. The buyer would be compensating Continental for the actual costs of building a cable system as a going concern. The Fresno venture analysis illustrates the same phenomenon from the buyer's perspective: Continental was compensating the seller for start-up losses and deferred returns, and itself anticipating unrealized economies. The purchase price necessarily reflects a valuation greater than the net book value of tangible assets.

2. "Excess" Acquisition Costs in Other Industries

When the Commission considers all of the economic and operational factors that Continental has detailed above -- including the Fresno case study and the success achieved in meeting the very goals of that acquisition -- it should fairly conclude that economic valuation of the initial cable rate base usually will include some or all intangible assets and/or recapture of the operator's prior operating losses and deferred returns. It is simply wrong to assume that acquisition "premiums" above book value represent uneconomic excesses or the exercise of market power measured by "Tobin's q".

In outlining the Commission's principles for determining the overall rate base, the Notice refers repeatedly to the careful choices that must be made, in order to ensure that

the initial rate base adequately compensates the cable operator while producing cable rates that are reasonable. The Notice recognizes that the valuation of cable plant and other assets should reflect all costs incurred, and may include so-called "excess" acquisition costs. [¶35]. The Commission notes that the expression "excess" does not imply that all such costs are "excessive" or imprudent [n.40], although somewhat incongruously the Notice also proposes to disallow all such "excess" costs from the rate base in favor only of allowing cable operators to amortize such costs. [¶40 and 41]. In addition, the Notice recognizes that the choice of an initial valuation methodology for plant assets, such as original or replacement costs may affect, in turn, the treatment of such "excess" costs in the rate base. [¶34]. Finally, the Notice also raises the relationship between the valuation of a cable property and the so-called "Tobin's q" ratio -- which it incorrectly interprets as indicating market power whenever the ratio is greater than one. [¶37 and n.43.][21/]

21/ Tobin's q analysis is simplistic and is never used as a substitute for accepted industrial organization economic analysis, such as industry structural measures or analysis of entry/exit barriers. The Commission's own analysis demonstrates why "Tobin's q" has played no role in formal antitrust policy or other spheres of government economic regulation, and has no utility here either. Policies Relating to the Provision of Cable Television Service, Report, MM Docket 89-600, 5 F.C.C.Rcd. 4997-4999 (¶¶54-58); id. at 5071-79, App. E (¶¶1-20) ("1990 Cable Report"). A "q ratio" greater than 1.0 could indicate at least four types

[Footnote cont'd.]

"Tobin's q" has no empirical or policy value in this context. Firms subject to effective competition frequently are valued in excess of book assets or even the replacement costs of assets. In many industries subject to technological efficiencies, the replacement costs of some plant and equipment may be less than or equal to depreciated book value. Thus, all firms with values in excess of book value would presumably exhibit market power, under the "q" formulation, even though more orthodox analyses would not support such a conclusion.

However, objective market valuations do reflect the value of a firm as a going concern and the value of the firm in the future, based upon the products, the demand and other

---

[Footnote cont'd.]

of conditions (a) the firm has monopoly power, i.e., the ability to raise prices in a market for a good or service for which there are no effective substitutes; (b) the firm has developed a superior product, exceptional management expertise and/or has invested successfully in market and product development efforts; (c) the replacement cost of the firm's assets is underestimated or otherwise mis-specified in calculating the "q" (see 1990 Cable Report at App. E, ¶14 and n.11), or (d) some combination of the above factors. If the "Tobin's q" were an accepted measure of market power, many industries could be subject to government price regulation. The important point is that the empirical study required to analyze these four factors (and perhaps others) separately is largely identical to the analysis that should be applied to determining how much of a cable operator's intangible assets should be included in its initial rate base under cost of service regulation. Therefore, it is entirely circular to try to rely on "Tobin's q" for any purposes specifically related to valuation of assets properly included in the cable operator's rate base.

opportunities in the markets its serves. There are extensive empirical data on competitive market valuation of firms. Continental reviewed data on acquisitions and mergers of communications and telecommunications companies in the 1985 to 1990 period, provided by Lazard Freres & Co. and the Securities Data Company.22/

For the 1985-90 period available transaction data showed that radio stations traded at multiples of 1.1- to over 27 times book value; television stations traded in the range of 2.6- to 4.7- times book value. Most or all of these properties were in multiple outlet markets where effective substitutes may be presumed to exist. Similarly, in this period a number of long distance service resellers or smaller facilities-based carriers traded a significant multiples of curent earnings or book values. Teleconnect Company was acquired for 2.5 times book value and 18.7 times earnings per share; in 1990 MCI bought Telecom*USA for 5.7 times book value, the same multiple for which LiTel

---

22/ This type of analysis could be extended with additional time and effort to identify other representative transactions. Some acquisitions involve firms with sustained net losses; such "distress sale" transactions normally will involve a low or negative multiple of assets or revenues, and thus should be excluded from this type of analysis. Similarly, acquisitions involving financial institutions or firms with significant financial services business, should likewise be excluded. In recent years this sector has been especially depressed, and "asset" valuations for financial service firms on loans outstanding are not comparable to other industries.

Communications was acquired two years earlier. All of these smaller carriers were deemed to be "non-dominant," by the Commission at the time, i.e., to lack any significant market power. Cellular telephone properties have traded at substantially higher multiples than other communications properties, even though the cellular market has been structured so as to provide a direct substitute to each supplier's service and cellular telephone rates typically are not regulated in a cost of service or price capping regime. Cellular properties traded in the 8.5- to 21 times book value range in the 1985-90 period.

The recent announcement of AT&T's agreement to acquire McCaw Cellular Communications for approximately 10.6 times current annual sales and 28 times Earnings Before Depreciation and Income Tax may establish the record size for a transaction involving a telecommunications property.

Likewise, local telephone companies, regulated in order to prevent the exercise of undue market power, are typically bought and sold at multiples of book value. The Sprint and Centel merger agreement in 1992 was valued at $2.85 billion. Telecommunications Reports, June 1, 1992, p. 13. But on the date it was announced the approximate market value of Centel (the acquired company) was $3.6 billion, but its net plant rate base was only $1.6 billion; and its assets were only $1.86 billion.

FCC Statistics of Common Carriers, 1991, Table 2.9, lines 350 and 360. Thus, notwithstanding even the higher market valuation of Centel (most of whose assets are subject to rate regulation), the merger occurred at a multiple 1.5-time assets and nearly 1.8-times the rate base subject to federal and state regulation.

Similarly, the GTE/Contel merger in 1990 was valued at $6.2 billion. Telecommunications Reports, July 16, 1990, p. 1. In 1990 the reported net plant rate base for the Contel telephone companies was $2.19 billion, so the sale occurred at 2.8-time the regulated rate base and 2.4-times reported assets. FCC Statistics of Common Carriers, 1990, Table 2.9, line 350. 23/

Pacific Telecom's purchase of Anchorage Telephone Utility in 1989 was priced at $412 million. ATU's total assets were $299 million, so the acquisition price was at a 1.38 multiple over assets. ATU's operating revenues when it was purchased were $81 million; the acquisition multiple to revenues 5.1 times. Telecommunications Reports, August 28, 1989.

In each of these instances, the acquisition price of the firm, each one predominantly engaged in providing regulated

---

23/ Contel's book value was reported at the announced date of the merger as $10.54 per share. At the acquisition price of $39.37 per share, price was a multiple of almost four times book value. In total figures, Contel, with a net worth of slightly less than $1.7 billion "on the books" was acquired for $6.2 billion. Investment Dealers Digest Information Services Inc., Mergers and Acquisitions Database (1990).

telephone services, reflected a significant multiple over the regulated assets. Thus, if regulation is assumed to be effective in curbing monopoly power, the acquisition price multiples did not represent an "excess" but rather an economic source of value. Cable assets being brought into rate base regulation for the first time likewise contain legitimate sources of economic value in excess of the depreciated value of "hard" plant assets. Thus, in order to establish the initial rate base in a cable operator's cost of service showing, the Commission should allow operators to establish a valuation that reflects the going concern value; recapture of expenditures incurred during deregulation, including start-up losses and deferred returns; and any premiums paid for cable acquisitions above nominal book value or estimated replacement cost. The operator's showing should be consonant with legitimate economic valuation, but in most instances it will result in an initial rate base in excess of the nominal book value of plant and equipment alone.

3. Continental's Proposed Transition Adjustment for Acquired Systems

Continental's Fresno, California acquisition did not garner the headlines that Multivision's Western Tennessee acquisition drew, but it fundamentally disproves the Commission's erroneous assumption that a purchase price above book value cannot reflect unrealized economies because no "monopolist" would introduce such efficiencies after acquisition. Indeed, the